IN THE CLAIMS:

Please amend the claims as follows:

Please cancel claims 2-5, 20-22, 28 and 29 without prejudice.

Please add new claims 30-54 as follows:

30. A recombinant influenza virus comprising a heterologous sequence which encodes a tumor antigen, wherein said sequence is inserted into an open reading frame of a genomic segment of the influenza virus.

31. A recombinant influenza virus comprising a heterologous sequence which encodes a tumor antigen, wherein said sequence is in a bicistronic arrangement with an open reading frame of a genomic segment of the influenza virus.

32. A recombinant influenza virus comprising an epitope of a tumor antigen, wherein said epitope is inserted into an open reading frame of a genomic segment of the influenza virus.

33. A recombinant influenza virus comprising an epitope of a tumor antigen, wherein said epitope is in a bicistronic arrangement with an open reading frame of a genomic segment of the influenza virus.

34. The recombinant influenza virus of any of claims 30 or 31, wherein said genomic segment is a structural gene of the influenza virus.

35. The recombinant influenza virus of claim 34, wherein said structural gene is HA or NA

36. The recombinant influenza virus of claim 31 or 33, further comprising a mammalian internal ribosome entry site upstream of the open reading frame of the genomic segment of the influenza virus.

37. The recombinant influenza virus of claim 31 or 33, further comprising an endoplasmic reticulum insertion signal sequence upstream of the heterologous sequence which encodes a tumor antigen.

38. The recombinant influenza virus of any of claims 30 or 31 which is attenuated.

39. The recombinant influenza virus of any of claims 30 or 31, wherein the tumor antigen is a human tumor antigen recognized by T lymphocytes.

40. The recombinant influenza virus of claim 39, wherein the human tumor antigen is a melanocyte tumor antigen.

41. The recombinant influenza virus of claim 39, wherein the human tumor antigen is a breast, ovarian, cervical, or pancreatic carcinoma antigen.

42. A vaccine formulation comprising the recombinant influenza virus of claims 30 or 31, and a pharmaceutically acceptable carrier, in an amount effective to treat a tumor-bearing mammal.

43. A vaccine formulation comprising the recombinant influenza virus of claims 30 or 31, and a pharmaceutically acceptable carrier, in an amount effective to generate an immune response against tumor cells in a tumor bearing mammal.

44. A vaccine formulation comprising the recombinant influenza virus of claims 30 or 31, and a pharmaceutically acceptable carrier, in an amount effective to immunize and prevent tumor formation in tumor free mammals.

45. The recombinant influenza virus of claim 40, wherein the melanocyte tumor antigen is gp100, MART-1/MelanA, Trp-1, or tyrosinase.

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46. The recombinant influenza virus of claim 39, wherein the tumor antigen is a widely shared antigen.

47. The recombinant influenza virus of claim 46, wherein the widely shared antigen is MAGE-1, MAGE-3, BAGE, GAGE-1, GAGE-2, N-acetylglucosaminyltransferase-v, or p15.

48. The recombinant influenza virus of claim 39, wherein the tumor antigen is a mutated antigen.

49. The recombinant influenza virus of claim 48, wherein the mutated antigen is β-catenin, MUM-1 or CDK4.